To connect and flow in Seoul: Ubiquitous technologies, urban infrastructure and everyday life in the contemporary Korean city

Jaz Hee-jeong Choi | Adam Greenfield

Abstract

Once a city shaped by the boundary conditions of heavy industrialisation and cheap labour, within a few years Seoul has transformed itself to one of the most connected and creative metropolises in the world, under the influence of a new set of postindustrial prerogatives: consumer choice, instantaneous access to information, and new demands for leisure, luxury, and ecological wholeness. The Korean capital stands out for its spatiotemporally compressed infrastructural development, particularly in the domain of urban informatics. This chapter explores some implications of this compression in relation to Seoulites' strong desire for perpetual connection, a desire that is realised and reproduced through ubiquitous technologies connecting individuals both with one another and with the urban environment itself.

We use the heavily managed urban creek Cheonggyecheon as a metaphor for the technosocial milieu of contemporary Seoul, paying particular attention to what its development might signify for Seoulites both as a constituent node of the city and as an outcropping of networked information technology. We first describe some of the historic, social and economic contexts in which the Cheonggyecheon project is embedded, then proceed to discuss the most pertinent facets of Korean-style everyday informatics engaged by it: ubiquity; control and overspill; government-industry collaboration; lifestyle choice; and condensed development timelines.

HISTORY AND CONTEXT

> A stream of fresh water. Shoals of fish orbit in a leisurely manner; curious children point them out, all the while being photographed by their delighted parents. Through the sound of the running water, surrounded by laughter and the little shutter-clicks from cameras and camera phones, a young couple are crossing evenly-spaced stepping stones, hand in hand. The air feels lush, fragrant, alive.
>
> Standing on the many bridges arching over the stream, you realise you are at the centre of one of the most populous, polluted, quickly-developing, and densely interconnected metropolises on the planet. You are at Cheonggyecheon, in the very heart of Seoul.

Originally stretching ten kilometres from its origin to the point at which it eventually meets the Han River, Cheonggyecheon's history as an urban feature dates to the Joseon Dynasty's selection of Seoul as its new capital, at the beginning of fifteenth century CE. As a restored and managed stream, it now runs for almost six kilometres across the central city.

Recognition of Cheonggyecheon's potential benefits for Seoul residents was initially realised in simple forms: as 'a sewage system, a laundry and playground for children' (Park, 2007, p. 9) and adults alike (Seoul Development Institute, 2004, p. 1). Its use as an open sewage system evidently became unsustainable sometime during the Japanese occupation, leading to a first attempt at dredging and partial covering, with the aim of safeguarding Japanese citizens from disease and crime (*ibid.*). However, with the intense national focus on economic reconstruction in the post-liberation (1945) and post-war (1953) periods, and a corresponding slide into social and environmental negligence on the part of a preoccupied government, attempts at improvement fell by the wayside. Cheonggyecheon remained – and was generally perceived as – a perilous seam in the fabric of Seoul.

The stream's natural flow finally came to an end during Park Chung-hee's authoritarian administration (1961-79), a period in which the thrust toward national greatness was heavily predicated on, and identified with, export-oriented industrialisation. During this period, the government's need to make its authority and legitimacy visually manifest in modernisation – amidst a broad concomitant suppression of nature, history, and human rights – began to shape the city in ways that are still visible today. The result of this approach was evidenced in a contemporary statement of Kim Hyeong-ok, then mayor of Seoul: 'The city is lines.' Straight wires and streets started to replace traditional winding roads.

As part of this rapid national modernisation process, Cheonggyecheon was filled with cement, and was used as the foundation for both local streets and a high-capacity roadway transporting products and people in and out of the city centre. This was the height of the period often called the 'miracle on the Han (한강의 기적)' – approximately three decades from the mid-1960s to the Asian financial crisis of 1997 (Kleiner, 2001, p. 254) although the term is generally used to refer to the first two decades – in conscious emulation of the postwar West German *Wirtschaftwunder* (economic miracle), or 'miracle on the Rhine.' The stream was effectively

ploughed under, literally subducted beneath the infrastructural development perceived as necessary to the advance of one of Asia's surging 'tiger' or 'little dragon' economies.

During this "Miracle" phase, a large-scale national effort – both the iconography and the subjectivity of which frequently involved themes of heroic sacrifice – was directed toward the end of rapid economic development. The predominant institutional structure which South Korea relied upon to accomplish this breakneck industrialisation was the *chaebol*, a huge and highly centralised, but heavily diversified, family-owned form of business conglomerate with no direct comparison in the Western world.

Chaebol are often compared with the Japanese *zaibatsu*, written with the same Chinese characters. But although they were originally modelled after the Japanese exemplar, during Park Chung-hee's administration, the distinctions between the two institutional forms are more than simply a matter of different pronunciation: zaibatsu have the organic means to manage their financial sustenance, typically through a network of wholly-owned banks and financial institutions, whereas chaebol lack these structures and are thus largely dependent upon the state's tight control over the mobilisation and distribution of financial resources (Chang, 1992, p. 46). During the Miracle period, comparatively few chaebol, working in close coordination with national government, established Korean competitiveness in shipbuilding, automotive manufacture, consumer electronics, and especially construction - first for the domestic and then, eventually, for the global market.

Beneath this ostensibly monolithic surface, things were far from quiescent. It was perhaps inevitable that a rapidly-developing nation would experience multiple and major social, political, and cultural shifts in the wake of any such breakneck economic expansion, and this is in fact precisely what happened: South Korean society experienced simultaneous shifts away from the more overt forms of authoritarianism politically, and from a largely agrarian population base towards an intense degree of urbanisation demographically and economically (Choe, 2005). There were important psychological shifts as well: to some degree, the readiness of the Miracle generation to sublimate their personal hopes and dreams to the national good was predicated on the belief that their sacrifice would purchase all the fruits of choice (both democratic and consumerist) for their children.

Major democratic reforms were launched in the yearlong run-up to the Seoul Olympics of 1988, and were pursued alongside a national agenda of globalisation (*segyehwa*), which persisted for a decade until, in 1997, the Asian economic crisis enveloped the nation. This ultimately led to a painful socioeconomic reconfiguration, under a restructuring mandate imposed by the International Monetary Fund that was designed to bring Korea into line with the prevailing neoliberal international framework (Crotty & Lee, 2006) (or, as one World Bank report calls it, the 'standard Anglo-Saxon blueprint')(Lee, Kim, Lee, & Yee, 2005, p. 4).

In the years since the IMF intervention and subsequent renewal of economic growth, Korea has gone through yet another dramatic shift, this one flowing outward from the technological and cultural industries. This is the so-called 'Korean Wave' (Choi, 2008, forthcoming), driven at least in part by the widespread local adoption of network technologies, including mobile telephony and broadband Internet.

Contemporary media-cultural and digital communication developments have occurred in a co-evolutionary spiral; the Korean Wave itself has been the result of ‘non-static exogenous and endogenous convergence processes in an evolving system’ (*ibid.*) in which the individual user – of the city and of informatic apparatuses – plays a crucial role in sustaining and expanding the network as a whole. This is a complex and organic infrastructural development linking micro- and macro-networks, rather than one that is hierarchically controlled and ordained from the top down. It is in this framework that the recuperation of Cheonggyecheon can best be understood as symbolic of the paradigmatic shifts now taking place in contemporary Korean society, with its new emphasis on individual desire, choice, amenity, and lifestyle.

The Cheonggyecheon restoration project was launched in 2003 by the then-mayor of Seoul (and recently-elected President of South Korea), Lee Myung-bak, as part of a comprehensive ‘public betterment’ initiative aimed at improving transportation safety, cultural understanding, and industrial, economic, and ecological conditions in areas surrounding the capital (Seoul Metropolitan Government, 2002). Within a comparatively short two years, disputes amongst various commercial, residential, and political parties were negotiated and resolved through an official body consisting of representatives from these and other sectors (known as the "Citizen’s Committee"), and the construction of the waterway was completed, at an estimated cost of KRW 900 billion (approximately EUR 667M / USD 900M).

The result of this effort was 5.84 kilometres of cleanwater stream, sited between two parallel walking paths (See Image 1a) leading from residential suburbs in the east, through industrial and commercial districts, into the City Hall (While the neighbourhood where the pathways end is undoubtedly the civic and business centre of northern Seoul, it remains a contrast to the younger, more fully-developed and more privileged Seoul on the south side of the Han river [See Image 1b]).

Image 1a

Image 1b

The new Cheonggyecheon serves Seoulites as an open and accessible multi-functional place for leisure in and of itself. At the same time, it clearly functions as a space of mobility and flow, a conduit connecting multiple sectors of Seoul. This multiplicity of readings, meanings, and uses is one of the main characteristics of contemporary urban development in Seoul, a typological obscurity that tends to confound simple classification. It is in this respect that Cheonggyecheon can be understood to epitomise four factors shaping the technosocial contours of contemporary Korean life, four onrushing streams so intricately interbraided that it can be difficult to disentangle them:

· As we shall see, Cheonggyecheon captures in its very essence the **complicated negotiations between flow, control, and more-than-occasional overspill** that seem to inhere in everyday Korean spatial practice.

· The **institutional framework** within which the creek was developed demonstrates the way in which, compared to Western democracies particularly, South Korean society depends on a high degree of coordination between government and industry (chaebol in particular) in determining urban, industrial, and technological policy.

· Finally, the **compressed timeline** of the creek's redevelopment project reflects the prevailing *ppali-ppali* (hurry hurry / 빨리빨리) ethos, signalling both 'hastiness' and 'dynamism' (Kang, 2006, p. 47) in adopting and adapting to technological and social change.

· In the wake of the transition to a postindustrial economy, Cheonggyecheon's role as a symbol and manifestation of leisure space/time epitomises the **broad public endorsement of a hedonic agenda**, dedicated to consumer choice, the pursuit of the 'noble' life, and perhaps even a greater awareness of and respect for the natural environment.

We argue that these factors are likely to shape the experience of ubiquitous and ambient informatics not merely within Korea, but – owing to Korea's emerging status as a leading exporter of technical products, components, and frameworks – globally as well. We begin our discussion by examining the concept of computational ubiquity in the context of contemporary Seoul, and then proceed to a discussion of each of these four factors in detail.

UBIQUITY

In order to situate the contemporary desire for ambient informatics correctly, it is necessary to first understand that the everyday Korean experience of information technology is *already* one of ubiquity: in his article, 'Seoul: birth of a broadband metropolis,' Townsend (2007) cites 2004 government figures claiming 80% household broadband penetration, one of the highest rates in the world, while the International Telecommunication Union has placed Korea at the top of its Digital Opportunity Index for the two years 2005 and 2006 (International Telecommunication Union, 2006).

In such an environment, Internet-derived conventions become part of the daily *lingua franca,* with manifestations such as emoticons – for example, (^_^) – rendered without explanation in newspaper headlines, or in branding intended for the mass audience. Technical terms and jargon infiltrate everyday life, in a way that is clearly beneficial to those institutions with something at stake in the mass adoption of technology. One result of this is that the single Koreanized-English word "ubiquitous," and the *u-* prefix derived from it (e.g. "u-City," see Hwang in this volume), is now commonly understood by the general public to refer to a technological regime positioned as desirable; an example epitomizing two of the aspects discussed in this paper is a current slogan used by the Ministry of Information and Communication (MIC), 'Happy U-life that do with U-Korea realization.'

This is nowhere more visible than at Cheonggyecheon, where government policy, aspirational ubiquity, and public space have become fused to a degree that is hard to convey to those unfamiliar with the Korean way of doing and making things. The official government portal *Korea.net* invites residents and visitors to 'Experience Ubiquitous Seoul at Cheonggyecheon Event,' where they might enjoy a 'rush of high-tech cyberspace and nature in one central-Seoul spot' (Korea.net, 2007).

By re-designating the stream 'U-Cheonggyecheon,' and touting the deployment of high-tech assemblies to 'monitor its purity and water and pollution levels,' the notion of technological *testbed* is collapsed against that of *riverbed*. Once thus embedded, visitors can indulge themselves in technologically-enhanced leisure with a frisson of ecological responsibility, interacting with features such as 'Free Board' (a digital bulletin board on which the user can

create their own multimedia content, and email it for free); a touch-screen based ‘Interactive Media Board' providing a variety of information about Cheonggyecheon; and LED-equipped street lamps, which are also Internet hotspots in disguise (*ibid.*).

If, as an unnamed Seoul Metropolitan official explains, this overcoded space is explicitly a ‘standard model and guide for other ubiquitous projects,’ it is not the only one. Although sponsored by the private Korea Home Network Industries Association, the Ubiquitous Dream Hall displays cutting-edge domestic technologies in a privileged home on the grounds of the Ministry of Information and Communication, literally across the street from historic Gyeongbokgung Palace, while visions of domestic Weiseriana are presented to consumers in seasonal exhibitions like the popular Daelim Model House, in the fashionable, upper-class Apgujeong neighbourhood.

All of these manifestations enthusiastically embrace, to a degree that tends no longer to be the case among Western technology vendors, the traditional Weiserian vision of ubiquitous computing as heavily-instrumented space (cf. Bell & Dourish, 2007; Weiser, 1995), and are in turn welcomed with equal gusto by a nation of consumers increasingly primed to regard such technological interventions as *de rigeur* appurtenances of the good life. Indeed, during the exhibition’s season, long lines of would-be residents file through the dazzling, spacious dream apartments; Image 2 shows the files of bowing, elegantly-dressed models deployed to greet their tour buses on arrival.

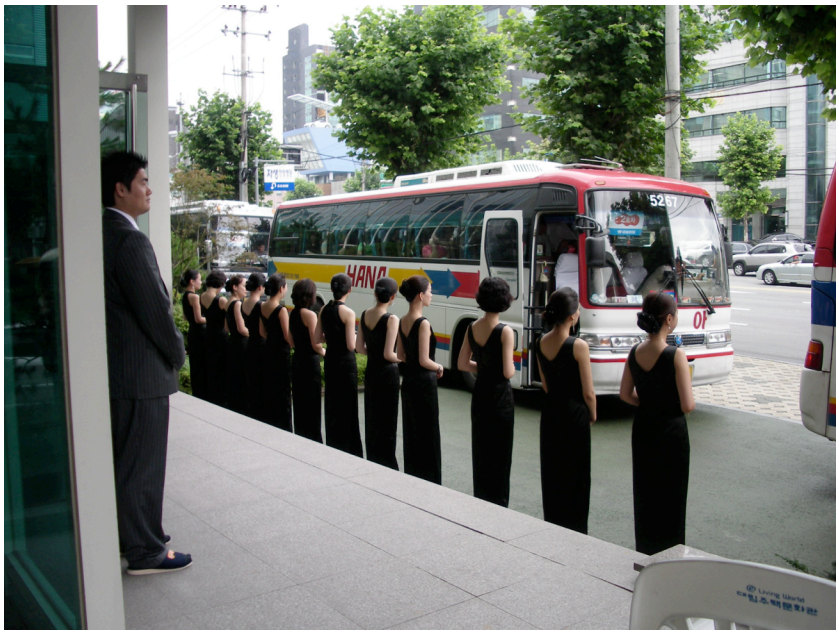

Image 2

Here visions of computational ubiquity are closely coupled to notions of ease, leisure, and luxury, which may go some way toward explaining why MIC’s vision for rolling out next-generation ubiquity, the so-called ‘IT 839 Strategy,’ enunciates a (somewhat peculiar for a highly technical infrastructure-development program) success metric of GDP USD 30,000 per capita. There is no doubt that a vision of robust domestic ubiquity is latent in the ‘eight services,

three infrastructures [and] nine growth engines' enumerated in IT 839 (see Table 1), which also claims the emergent WiBro (wireless broadband) and DMB (digital multimedia broadcasting) standards as Korean innovations. But is it a particularly Korean one?

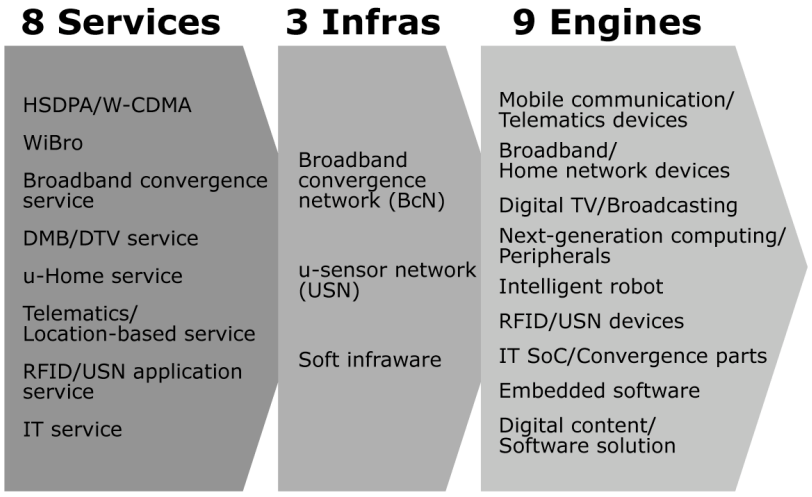

Table 1. Adapted from MIC (2005)

The implied seamless model of spatiality – with no differentials or gradients of access within it – embraced by the IT 839 strategy is somewhat at variance with the way ubiquitous urban informatics are currently experienced in the everyday life of Seoul, an experience whose features are largely shaped by the unique '*bang* (room)' culture of Korea. Translating 'bang' as 'room,' however, threatens to obliterate a variety of meaningful distinctions between the typologies, distinctions that clearly condition the type, timing, and intensity of social activities that take place within.

In contrast to the general understanding of a 'room' embedded in Western spatial practice – a single-purpose space, designed, designated, and provisioned for a specific function – bangs in traditional Korean culture are generally required to support a multiplicity of functions, and are provisioned accordingly. Take, for example, the custom of serving food on low tables that can be folded away. It was a common practice (and still is, in small residential spaces) for the living room to be metamorphosed into the dining room when the table is set up, for it then to be converted for study during the evening, and finally into a bedroom at night, when *yo* (Korean futon) are unfolded on the floor. This inherent reconfigurability of domestic space has become commercialised in the contemporary Seoul urbanscape (in fact, by the chaebol themselves, in the appointments of their large-scale developments), blurring the border between what is imagined and lived as private and as public.

The following excerpt from Sung Hong Kim's curatorial statement (Kim, 2004) for the Korean Pavilion at the 9th Architecture Biennale of Venice – themed *City of the Bang* – aptly captures the essence of this culture:

> *[B]ang* has infiltrated the Korean urban landscape of commercialized space with enterprises such as the *PC bang*, *Video bang*, *Norae bang*, *Jjimjil bang*, *Soju bang*, and

> others. The *Norae bang*, a scaled-down version of the Karaoke bar, is the primeval cave festival in the midst of the contemporary city. Visual, audible, olfactory, tactile, and gustatory sensations are simultaneously experienced in this tiny black box. Meanwhile, the *Jjimjil bang*, which combines a steam bath, fitness room, lounge, restaurant, and sleeping area, provides space where half-clothed bodies intersperse between a variety of functional areas. The *Jjimjil bang* blurs the lines between the collective and the individual, normal and deviant behaviour, privacy and voyeurism. The bang is an incarnation of the room, the house and the city, but it does not belong to any of them. The city of the bang oscillates between the domestic realm, institutionalized place, and urban space.

Like the majority of other interior spaces in South Korea, most bangs are now heavily mediated and connected via broadband internet, providing additional opportunities for instant and spontaneous connection through geo-social mobility (bangs as decentralised connection points), and at the same time, constant and now 'given' connection through immobility (bangs as physically and socially constrained spaces) (Choi, 2007b; cf. Hjorth, 2007 on mobility/immobility). Ubiquitous computing, in this sense, is socially established and experienced through multiple overlaying infrastructural arrangements, both tangible and intangible, giving a sense of what Bell and Dourish call 'messiness' (2007, pp. 139-141) and what we have here termed overspill.

CONTROL AND OVERSPILL

A sense of boundaries being overrun is also inherent to Cheonggyecheon, albeit primarily through its absence or negation ("control"). Over time, the primary aim of the various governmental efforts at managing the creek have concerned the relationship between useful, life-giving *flow* and an undesirable *overspill*, with more or less heavy-handed interventions aimed at limiting the latter. The first known project on the site was one devoted to the control of seasonal flooding, ordered by King Taejong in 1406. Such flooding continued to occur despite near-continual efforts at intervention, with the most recent taking place in 2001 (though it was of a minor class, and water only flowed into the underground level).

If Castells (1989) characterised the modern world as a 'space of flows,' Seoul embodies this in several respects. Some days everything in the city seems to have slipped its bounds: the stuff of apartment lives tumbles onto balconies – 'verandas displaying racks of drying laundry, children's bicycles, and brown pottery jars for staple condiments and kimchi,' as noted by Nelson (2004, p. 5); clubs, parties, conversations, arguments and even commercial services extend heedless into the street (Lee, 2004, pp. 74-75); restaurants seem to store half their crockery on the sidewalk. Meanwhile, omnipresent Columbia and UCLA sweatshirts stand as synecdoche for the continual flux of traffic both cargo and passenger between Incheon Airport and New York and Los Angeles, the latter city enjoying the second-largest Korean population on the planet. The cultural roots of Korean identity are certainly felt, but what is visible is a hybrid, an overcoded overspill of cultural eclectics and constant negotiation.

Just as subject to change, perhaps surprisingly, is the visual envelope and appearance of local buildings. Amongst arrays of identical, matchbox-like apartment buildings in the Apgujeongdong district is the Galleria department store (see Image 3), the entire façade of which is made up of networked, programmable display elements capable of generating 16 million colours (Arup, 2004). Here, spatial demarcation becomes obscured, and space itself thus becomes a fundamentally subjective experience, conceptually and sensorially. Through grids of such connected lights, Seoul becomes the 'circuit city' (Vanderbilt, 2005) where individual narratives flow together to create a common history.

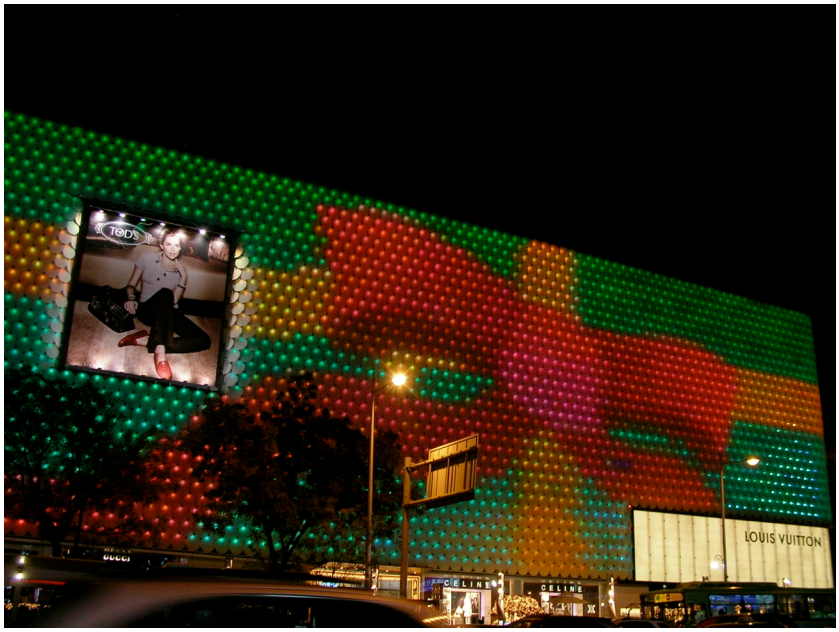

Image 3

Seoul is found in the flux hinging between control and overspill: the circuit city of bangs, of screens, and in flux (Choi, 2007a). How is such a city managed politically and economically today? We point to the concept of chaebol to answer this question.

CHAEBOL NATION

As a high-profile, high-prestige development in the very core of the capital city, Cheonggyecheon's recent evolution would be hard to imagine without the involvement of the chaebol, as contractors and executors of the national will. It is almost impossible to overstate the influence these massive business combines have on Korean life: the commercial hegemony established by the chaebol early on in the post-Korean War reconstruction effort, and consolidated in the Park Chung-hee years, continues to be manifested in the Korean landscape, literally in concrete – not least in the arrays of identical housing blocks that cover the city and the countryside beyond in endless domino ranks, each proudly emblazoned with its corporate logo (see Image 4).

Image 4

A drive from central Seoul to one of its outlying newtowns simultaneously epitomises how far into daily life the chaebol reach, and captures something of the current national mood. Accessible via Cheonggyecheon walking paths, Doota, or Doosan Tower, is one of the biggest and most well-known shopping malls in the popular fashion district of Namdaemun, while the same conglomerate has recently (2005) developed an entire edge-city newtown near Seoul. This scale of private development is by no means considered particularly excessive by local standards; as their primary slogan – *We've* – boasts, Doosan is a conglomerate whose business interests reach from wine production and ownership of a baseball team to the design and construction of surface-to-air missile systems.

Indeed, nothing is more ubiquitous in Korea than the chaebol, and none of the chaebol is more ubiquitous than Samsung: as the Seoul-based net artists Y0UNG-HAE CHANG HEAVY INDUSTRIES (http://www.yhchang.com), themselves named in parodic imitation of chaebol, point out, one can be born in a Samsung hospital, attend a Samsung school, marry in a Samsung chapel, live in a Samsung home, and be buried in a Samsung casket ("Samsung will help me get over being dead...and being alive").

It is only natural, therefore, that the chaebol loom large in any Korean discussion of ubiquitous development, both at the level of infrastructure (Doosan has a business unit dedicated to "ubiquitous framework standardisation") and consumer-grade interfaces, nor that governmental specification of the relevant technical standards is pursued in close cooperation with them. The emphasis on institutional coordination has clear implications for the prospective development of ambient informatics, not always those that an onlooker might be tempted to imagine. More specifically, programs undertaken in the light of close chaebol-governmental cooperation would appear to benefit from:

· a markedly accelerated speed of development, in accord with the ppali-ppali mentality;
· a certain consistency of aspiration and execution, especially as concerns the production of physical space, with the associated desires reproduced and diffused via the single, centralized national media market; and
· increased interoperability among and between communication devices and platforms, resulting in a smoother and more fluid user experience.

Not all of these things are necessarily true. However tempting it may be – however often their policies seem to evolve in tune with the personal desires of one or another charismatic chairman, even when that desire contravenes general business ethics or an obvious profit motive – the chaebol cannot be thought of as monolithic organisations. The chaebol, by and large, are in fact internally heterogeneous, with sub-companies, divisions and business units run by other members of the family (siblings or cousins, for example) each of which will retain a certain level of autonomy.

Particularly, the fact that chaebol are not simple monoliths can lead to user experiences that are sporadic and disconnected. From this perspective, the chaebols' internal heterogeneity means that devices bearing the Samsung or the LG brand were likely developed by entirely discrete design organisations, with no overlap of personnel, process, or practice. Despite the Weiserian promise to 'encalm as well as inform' (Greenfield, 2006, p. 29), very few of the current generation of Korean-designed digital tools have the same interfaces, very few of them work well together or have been designed with seemingly any recognition that their actual environment of use would likely be one of saturation and synchrony. (In fairness, the same situation is true of both Japanese and Western commercial competitors and "free" or open-source alternatives, with few exceptions, however, the design organisation is internally organised. The point is merely that the apparent homogeneity of the chaebol confers no evident benefit to users of products and services they design and bring to market.)

There is also a clear question as to whether what is good for the chaebol is good for Korea. In criticising excessive urban renewal occurring in South Korea, Yim (2006, pp. 116-117) argues that an average of 50-60 percent of the total profit generated by Korean construction industry comes from apartment construction, which amounts to approximately 8% of the national GDP. This massive incentive, he further asserts, leads to chaebol promoting the physically higher, high-tech, and highly self-contained (and thus isolated) living environment of the apartment complex as an aspirational image for 'good living.' Clearly, chaebol produce space and fill it with their increasingly networked products and services. This environment, people are constantly persuaded, is one in which the resident can remain safe, secure and comfortable, while managing every outward-facing aspect of their lives via fluid high-speed connections: a utopia of privilege, reserved for those who are worthy of the 'noble life.'

NOBLESSE OBLIGE

Across the hoardings where a new apartment development will rise in trendy Apgujeongdong are emblazoned the words *The Noble Community*; nearby, a bus-shelter ad urges waiting passengers

to consume, *For your nobility life*. There's even a (high)life-style magazine, positioned somewhere between *Vogue* and *Architectural Digest*, called *Noblesse* (노블레스). This is nothing if not a culture that wears its aspirations – like its brand names – on its sleeve.

So what counts as noble here? Judging from the images splashed across those same hoardings, three times as large as life: bowls, handkerchiefs, and umbrellas monogrammed with Italianate names. Tumi wheelaways, bottles of Johnny Walker Black clanking dully in the duty-free bag. Enough time to play golf and to visit the wonders of the world. (Another development, Polus, modestly compares itself to the Taj Mahal, the Sagrada Familia, the Arc de Triomphe, and the Empire State Building. Its slogan: "Over the borderline & Over the luxury" – see Image 5)

Image 5

The trappings of nobility even extend to the architecture of the body. In this context, 'noble' means smaller faces - sleeker, but retaining enough space for the bigger, rounder, doll-like eyes and higher nose. This is the new popular Korean-Western aesthetic, smooth, synthetic, and purchased. Although this vision of what constitutes the noble is not universally held, it is a broadly popular one, and to a significant degree it informs what happened at Cheonggyecheon: a perfected stream forged for the pleasure of a perfected population.

This new 'skin job' aesthetic, with its unachievable limit-case dream of nanometer-smooth surfaces, can contrast with the reality of Seoul's urban fabric, in places starkly. Across the river from Cheonggyecheon, a pedestrian bridge runs south from Banpodong's Express Bus Terminal across six lanes of traffic; with its dramatic uplighting, sharply-raked struts and pointless blue Ming the Merciless flanges, it looks like an escapee from William Gibson's "Gernsback Continuum." To gaze upon this bridge from far away, or to drive under it at speed, especially at night, is to enter a city that still lives mostly in the renderings favoured by Seoul's developers

and civic boosters (and in subway-ad versions of which a ‘re-gooded’ Cheonggyecheon figured heavily, for years before its unveiling). Urban furniture like this bridge, along with new subway lines and new building complexes, and enough English signage to tie them all together, were trotted out for the 1988 Olympics (which resulted in top-down democratic reforms), and then again for the 2002 World Cup (during which brigades of Red Devils, a Korean soccer supporters’ club which was organised from the bottom up, gained international attention).

These two events, and all the impedimenta introduced in their wake, were intended to usher this proud city at long last through the velvet rope and into the ‘world class,’ an ambition clearly stated in the Seoul Olympics’ very slogan, *Seoul to the World, the World to Seoul* (서울은 세계로, 세계는 서울로). However, the pedestrian crossing the bridge may see something else entirely. At close range, one cannot help but notice that the welds on its steps and stanchions are sloppy, incontinent, gappy, and that the translucent blue wings have long gone dull with wear. The bridge is not an aberration, an outlier. In its haphazardness, the pedestrian bridge joins the rivets of the girders holding up a parking garage at the Yongsan Electronics Market, the unfinished light wells in the ceiling of a high-end hotel’s lobby, and the letter “E” that for many years hung ten degrees off true, five stories up, on the side of the Newcore shopping center. The whole city, in fact, can feel to a visitor very much as if it has been assembled so quickly that large parts of it are in imminent danger of falling apart entirely; various observers (e.g. Feffer, 2003) ascribe this to the perceived need to *ppali-ppali* on the way to yet another economic Miracle.

While the ppali-ppali mode has seen South Korea make its entry to the domain of developed nations in impressively short order, this has been won at the cost of serious, and occasionally fatal, consequences – most notably, the 1995 Sampoong Department Store collapse, in which 937 people were injured and a further 501 lost their lives. The implications of a continued reliance on ppali-ppali for any domain of development as sensitively dependent on accurate configuration and ongoing maintenance as the deployment of ubiquitous information technologies are significant. Physical danger from faulty, undertested or undershielded devices is one possibility, especially with base stations and other high-energy retransmission equipment being placed in far closer proximity to living and sleeping quarters than would be considered prudent in the West. Just as evident, however, is a cavalier attitude with regard to less tangible potential hazards of ubiquity, privacy concerns, and so-called ‘digital divide' issues chief among them (Bell & Dourish, 2007, p. 138). (The latter is a problem that is already apparent in Korea despite, and paradoxically exacerbated by, the high-broadband penetration rate in urban areas; the Internet is now perceived to be so unremarkably vital to the management of everyday life that those without access are doubly disadvantaged.)

The tension between the reality resulting from *ppali-ppali* development and visions of the noble is acute, but generally addressed only obliquely. One manifestation, however, is that Koreans find it increasingly hard to accept the natural, with all its inescapable imperfections and variations from the statistical norm as evidenced in the rising popularity of plastic surgery; a study shows that approximately 81.5% of women between the ages of 25 and 29 feel that they need cosmetic surgery and 61.5% of them have already had more than one surgery done (Kim,

2007). Particularly in conjunction with the traditional collective mentality, in which deviance is deplored (Triandis & Suh, 2002), reparative cosmetic surgery becomes desirable not only for people, but also for the environment – an aspect for which the Cheonggyecheon restoration project has been heavily criticised as a costly urban facelift. It remains to be seen whether this wide pursuit of perfection and consumerist nobility can do anything other than create everyday predicaments, imperfectly concealed in the compressed timeframe of urgent development. Nevertheless, we can at least be certain of the destination to which all of these efforts are supposed to lead: a life of happiness.

HAPPY FOREVER

At the end of 2007, Samsung Anycall launched an advertising campaign urging people to *Talk, Play, Love*. While this slogan is incessantly animated across the brilliantly-coloured display façade of the aforementioned Galleria department store, Samsung presents another message on a huge video billboard in central Seoul, this one in English: *Happy Forever*. The context in which these slogans – so easily perceived by Western observers as Orwellian, even Stepfordian – are encountered suggests three things: these words accurately capture a mass aspiration in the contemporary Korean soul; they are meant literally; and they are meant seriously.

The word 'happy,' particularly, seems to occupy the place in the popular Korean imaginary that 'dream' does for many Japanese. However, whereas 'dream' generally suggests a state that is aspirational, and thus perhaps eternally deferred, 'happy' connotes a state that a person might reasonably expect to achieve in the course of ordinary existence. 'Happy,' for this audience only a very few decades removed from the most harrowing imaginable experience of wartime suffering and deprivation, is not outside history; it is meant to be realised in the here and now.

The chaebol, with their multipronged need to shift products and sell services, can often lend the impression that quality of life is a matter primarily of infrastructural technical innovation, rather than anything conventionally subsumed under the rubric of urbanism. High-quality urban environments are increasingly perceived by South Koreans as something to be planned, budgeted for, and delivered politically, commercially, and quickly, and not something forged in the contestation and negotiation of uses for public space, let alone in the active participation of residents *qua* citizens (cf. Gelézeau, 2007; Yim, 2006; Yang, 2005).

At this point, we ask, largely but admittedly not entirely in the spirit of devil's advocacy, if this city-as-lifestyle-as-service – where happiness itself is constructed as something consumed (cf. Luke, 2005) rather than participated in (cf. Rheingold, 2008, forthcoming) – is perceived by the overwhelming majority of its users as delivering value and satisfaction reliably and consistently, what benefit would be served by the minority, non-participant observers, advancing claims to the contrary? What would raising such claims do but complicate the swift and smooth delivery of services to the people who have freely engaged them? (Such an assertion would certainly seem to be among the many messages laminated into the recent victory of Lee Myung-bak.)

Given such conditions, democracy itself – defined as a process that attempts to balance interests

through a satisficing churn of discourse, deliberation, and disputation on the part of nearly all of the members of a community – may come to be deprecated locally, yielding perhaps to a softer strain of that authoritarian/consumerist fusion which finds its fullest contemporary expression in the People's Republic of China.

Those children whose democratic and economic entitlement had to be fought for by the Miracle generation are now parents of their own children – perhaps those we last saw curiously pointing at the shoals of fish at Cheonggyecheon. Looking at these children play, one might almost imagine that the balance of their lives will unfold as serenely and as generously as a late-spring day, in both material and spiritual registers; that happiness is truly something to which one might subscribe; that most if not all will be able to do so; and that it will all last.

In the late Joseon period, a noted poet and scholar, Lee Duk-moo, wrote a poem called *Song of the Full Moon* depicting a joyous scene of people waiting for the full moon on a bridge over Cheonggyecheon:

雪色澄明惟此宵　유독 오늘밤은 달빛이 맑고 밝아

Tonight snow is auspiciously bright and clear

人人候月廣通橋　사람마다 광통교에서 달을 기다린다

Everyone waits for the moon on the Gwangtong Bridge

歌童一隊聯群袂　노래하는 아이들 한무리가 여러 옷깃을 이어

A group of children bridge their collars together

齊唱東方行樂調　동방의 행락조를 함께 부르네

Singing the song of joy from the East

For the Korea(n)s, this imagined and long-deferred happiness may finally be realised in this city conceived – however rightly or wrongly – as a machine capable of delivering the good life to the majority of the people who live in it. Whether any such state can be lived as and in reality remains open to question, but we see an undeniable promise in the optimism so abundantly evident at Cheonggyecheon, and elsewhere in the streets of contemporary Seoul. This optimism inheres not least, perhaps, in the rise of technologies able to support collaborative efforts amongst individuals, who are together able to reimagine their once-guarded, isolar and literally defended city as a connected space, to and within which access is open and flexible.

For our own part, we believe that the ongoing convergence – imagined, in process, and lived – between what Seoul is and what it could be must occur organically, true to the desires and intentions of the Korean people. We remain hopeful that appropriately-designed ubiquitous technology will indeed empower people towards this end, and that we will once again witness (though in a vastly different technosocial context) Seoulites from diverse backgrounds coming together as joyously and hopefully as those depicted in the *Song of the Full Moon*.

BIO

Jaz Hee-jeong Choi is a doctoral candidate in the Creative Industries Faculty at Queensland University of Technology. Her research interests are in playful technology, particularly the ways in which various forms of playful interaction are designed, developed, and integrated in an Asian context. Her current research is on the *trans-youth* mobile play culture of South Korea at the intersection of play, culture, technology, people, and urban environment. Her website is located at www.nicemustard.com

Adam Greenfield is an instructor at New York University's Interactive Telecommunication Program, where he teaches Urban Computing. He is author of the 2006 *Everyware: The dawning age of ubiquitous computing* and co-author, with Mark Shepard, of the recent *Urban Computing and Its Discontents*. He lives and works in New York City with his wife, artist Nurri Kim.

ACKNOWLEGEMENTS

We would like to thank all the reviewers for their valuable comments. We would also note that the following images were externally sourced under Creative Commons licence (http://www.creativecommons.org):

· Image 1a: This image was sourced from Kai Henry's flickr page (http://www.flickr.com/photos/hendry/154550723), and is licensed under Creative Commons Attribution 2.0 (cc-by- 2.0). See this page for further information about the license: http://creativecommons.org/licenses/by/2.0/deed.en

· Image 1b: This image was modified from the original version on Wikimedia Commons, under the terms of the GNU Free Documentation Licence, Version 1.2 or any later version published by the Free Software Foundation. See this page for further information about the image and licence: http://commons.wikimedia.org/wiki/Image:Image-Map_Seoul-teukbyeolsi-big.png

REFERENCES

Arup. (2004). The biggest pixels in the world clad the Galleria West shopping centre, Seoul. Retrieved May 16, 2007, from http://www.arup.com/newsitem.cfm?pageid=5323

Bell, G., & Dourish, P. (2007). Yesterdays tomorrows: notes on ubiquitous computings dominant vision. *Personal and Ubiquitous Computing, 11*(2), 133-143.

Castells, M. (1989). *The Informational City*.

Chang, L. (1992). Financial mobilization and allocation: The South Korean case. *Studies in Comparative International Development, 27*(4), 41.

Choe, S.C. (2005). "The impact of globalization on the urban spatial-economic system in Korea." In H.W. Richardson & C.-H. C. Bae (Eds.), *Advances in Spatial Science: Globalization and Urban Development*. Heidelberg: Springer.

Choi, J. H.-j. (2007a, July 5-6). *All Things Big and Small: Rising Importance of Mobile Media in South Korea*. Paper presented at the China East Asia Media New Media Conference, QUT, Brisbane.

Choi, J. H.-j. (2007b, December 3-5). *Ready, Unsteady, Go: trans-youth mobile media and spatial experience in seoul*. Paper presented at the 2007 Australasia Interactive Entertainment Conference,, RMIT.

Choi, J. H.-j. (2008, forthcoming). The Korean Wave of U. In H. K. Anheier & Y. R. Isar (Eds.), The Cultures and Globalization Series: The Cultural Economy. London: Sage.

Crotty, J., & Lee, K.-K. (2006). The Effects of Neoliberal "Reforms" on the Post-Crisis Korean Economy *Review of Radical Political Economics, 38*(4), 669-675.

Feffer, J. (2003). *North Korea/South Korea: US Policy at a Time of Crisis*. New York: Seven Stories Press.

Gelézeau, V. (2007). *The Republic of Apartments (*아파트 공화국*)*. Seoul: Humanitas (후마니타스).

Gibson, W. (1997). The Gernsback Continuum.

Greenfield, A. (2006). *Everyware : the dawning age of ubiquitous computing*. Berkeley, Calif.: New Riders.

Hjorth, L. (2007, Oct 25-26). *Mobile and immobile imaging communities*. Paper presented at the Rikkyo-Yonsei International Conference, Tokyo.

International Telecommunication Union. (2006). *World Information Society Report*. Geneva: International Telecommunication Union.

Kang, J.-m. (2006). *Korean Code (*한국인 코드*)*. Seoul: Inmulgwasasang (인물과 사상).

Kim, H.-A. (2004). Korea's Development Under Park Chung Hee: Rapid Industrialization, 1961-1979. London: RoutledgeCurzon.

Kim, S. H. (2004). City of the Bang. *9th International Architecture Exhibition 2004 Venice Biennale* Retrieved May 8, 2007, from http://www.korean-pavilion.or.kr/04pavilion/e_2004_02.htm

Kim, Y. S. (2007). 70% of Women 'Under Stress from Appearence". Retrieved Jan 2, 2008, from http://www.medical-tribune.co.kr/news/sub_main_view.php?subm=2&number=13902&uplink=&code=ME31

Kleiner, J. (2001). Korea: A Century of Change. Singapore: World Scientific Publishing Company.

Ko, H. B. (2007). *Mobile Phone, Calling Philosophy (*휴대전화, 철학과 통화하다). Seoul: Chaeksesang (책세상).

Korea.net. (2007). "Experience Ubiquitous Seoul at Cheonggyecheon Event." Retrieved from *korea.net/news/news/newsView.asp?serial_no=20071126025* on 02 Dec 2007.

Lee, K., Kim, B.-K., Lee, C. H., & Yee, J. (2005). *Visible Success and Invisible Failure in Post-Crisis Reform in the Republic of Korea: Interplay of Global Standards, Agents, and Local Specificity* New York: World Bank.

Lee, M.-Y. (2004). The Landscape of Club Culture and Identity Politics. *Korea Journal, 44*(3), 65-107.

Luke, R. (2005). he Phoneur: Mobile Commerce and the Digital Pedagogies of the Wireless Web. In P. P. Trifonas (Ed.), *Communities of Difference: Culture, Language, Technology* (pp. 185-204). New York: Palgrave Macmillan.

MIC. (2005). A Leap to Advanced Korea based on IT: IT 389 Strategy. Retrieved Jan 2, 2008, from http://eng.mic.go.kr/eng/secureDN.tdf?seq=6&idx=2&board_id=E_04_03

Nelson, L. C. (2004). *Measured Excess: Status, Gender and Consumer Nationalism in South Korea*. New York: Columbia Univeresity Press.

Park, K.-d. (2007). Cheonggyecheon Restoration Project. Paper presented at the JFES-WFEO Joint International Symposium on River Restoration, Hiroshima University.

Republic of Korea Ministry of Information and Communications. Slogan. Retrieved from *eng.mic.go.kr/eng/index.jsp* on 02 Dec 2007.

Republic of Korea Ministry of Information and Communications. Ubiquitous Dream Home. Retrieved from *ubiquitousdream.or.kr/main.html* on 02 Dec 2007.

Rheingold, H. (2008, forthcoming). Using Participatory Media and Public Voice to Encourage Civic Engagement. In W. L. Bennett (Ed.), *Civic Life Online: Learning How Digital*

Media Can Engage Youth (pp. 97–118). Cambridge, MA: The MIT Press.

Ryu, J.-h. (2004). Naturalizing Landscapes and the Politics of Hybridity. Korea Journal, 44(3), 8-34.

Seoul Development Institute. (2004, Jul 26, 2004). The current state of Cheonggyecheong-related Folk Play and Its Contemporary Enactment (청계천에 얽힌 민속놀이 현황과 현대적 재현 방안). *Seoul Research Focus* Retrieved Dec 24, 2007, from http://www.sdi.re.kr/nfile/zcom_focus/14-1.pdf

Seoul Metropolitan Government. (2002). Cheonggyecheon Restoration Project: Needs & Influences. Retrieved Oct 24, 2007, from http://www.metro.seoul.kr/kor2000/chungaehome/en/seoul/sub_htm/2sub_02.htm

Triandis, H. C., & Suh, E. M. (2002). Cultural Influences on Personality. *Annual Review of Psychology, 1*(53), 133-160.

Vanderbilt, T. (2005). Circuit City. *Artforum, 44*(3), 65-66.

Weiser, M. (1995). The computer for the 21st century. In R. M. Baecker, J. Grudin, W. A. S. Buxton & S. Greenberg (Eds.), *Human-computer interaction: toward the year 2000* (pp. 933-940). San Francisco: Morgan Kaufmann Publishers Inc.

Yim, S. J. (2006). *Architecture, Our Self-Portrait (*건축, 우리들의 자화상*)*. Seoul: inmulgwasasangsa (인물과사상사).